# **President Harry S. Truman Fellowship in National Security Science and Engineering**

# August 2021

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#### 1.0 FELLOWSHIP DESCRIPTION

For over seventy years, Sandia National Laboratories (Sandia) has advanced the frontiers of science and engineering in the national interest. The President Harry S. Truman Fellowship in National Security Science and Engineering (Truman Fellowship) provides an opportunity for exceptional scholars to join Sandia in the continuation of this tradition of excellence. The Fellowship is named for President Truman who, in 1949, asked AT&T to accept managerial responsibility of Sandia and challenged us to provide "an exceptional service in the national interest"—a motto that leads us to excel to this day.

The Truman Fellowship provides the opportunity for recipients to pursue independent research of their own choosing that supports the national security mission of Sandia National Laboratories. The appointee is expected to foster creativity and to stimulate exploration of forefront science and technology and high-risk, potentially high-value R&D. The Fellowship appointment is for three years.

Sandia National Laboratories provides Truman Fellows a stimulating environment to broaden their education, training, and scientific research experience. Truman Fellows provide valuable stimulus to the research efforts of Sandia and make available the most recent developments of university science and engineering departments, as well as enhancing communication between Sandia, industry, and universities. The experience offers Fellows the opportunity to derive significant professional accomplishment and advancement of their career goals by conducting world-class research, as well as through participating in scientific and technical conferences, presenting seminars and publishing the results of their work.

A member of Sandia's technical staff mentors each Truman Fellow. The emphasis on mentoring allows Fellows to become an integral member of Sandia research and development teams while having the opportunity to acquire unique skills and growth during early career development.

Sandia is committed to nurturing an environment compatible with a broad group of people and perspectives in accordance with the accordance with the changing makeup of the workforce. In support of this vision, we actively recruit applicants from diverse groups of backgrounds and fosters an inclusive community.

#### 2.0 SANDIA NATIONAL LABORATORIES MISSION

In support of its primary mission in national security, Sandia maintains a strong commitment to both basic and applied science and their engineering applications. Our research advances fundamental knowledge while providing a foundation for the major scientific and technological development efforts that we carry out for the Department of Energy and other sponsors. Sandia's broad-ranging science and technology focus areas include:

- Bioscience
- Computing and Information Science
- Engineering Sciences
- Geosciences
- Materials Science
- Nanodevices and Microsystems
- Radiation Effects Sciences and High Energy Density Physics

For additional information on Sandia's mission and capabilities, click here.

#### 3.0 FELLOWSHIP ELIGIBILITY CRITERIA

- a. The ability to obtain and maintain a United States Department of Energy security clearance, which requires US citizenship
- b. Research in areas of interest to national security, as detailed in the required research proposal
- c. Candidates must have been awarded a Ph.D. within the past 3 years at the time of application OR will have completed all Ph.D. requirements by commencement of appointment; with strong academic achievement and evidence of exceptional technical accomplishment, leadership, and ability to team effectively.
- d. Candidates must be seeking their first national laboratory appointment (pre-postdoc internships excluded)
- e. Sandia National Laboratories is an equal employment opportunity/affirmative action employer. As a federal contractor, we request certain information from those applying for jobs for the purpose of gathering data for our security and affirmative action planning processes. The information provided is kept confidential and used only in accordance with federal regulations.

# 3.1 Fellowship Candidates

Candidates must display outstanding abilities in scientific research and show clear and definite promise of becoming outstanding leaders in the research they pursue. They are expected to have solved a challenging scientific or engineering problem in their thesis work or will provide a new approach to solving a challenging problem, as evidenced by a recognized impact in their field. The quality of the prospective candidate, irrespective of discipline, remains the overriding consideration when evaluating the application.

Please clearly address in your application, under Interest Statement #7.2, how you have accomplished any of the aforementioned.

#### 3.2 Fellowship Selection

Selection for this award is based on the candidate's original contribution to solving an important problem, its impact, research proposal, academic record and recommendations, science and engineering background, research interests and professional goals, and compatibility of background and interests with Sandia's research needs.

# 3.3 Fellowship Research Proposal

The research proposal is important to the evaluation of a candidate's application. Research proposals may address long-term science and engineering needs that support the Laboratories' mission or may be more focused and obviously aligned with our current mission. The Truman Fellowship Selection Committee evaluates research proposals objectively, considering the quality, the ability to publish, and the potential impact of the research on the scientific community.

# 4.0 FELLOWSHIP APPOINTMENT TERM

The Truman Fellowship is a three-year appointment. The appointment normally commences on October 1, although exceptions may be made to accommodate special circumstances. Many Truman Fellows are hired as regular staff during the term of their assignment. The effective service date for a converted employee is the start date of the initial term of temporary employment provided there is no more than a 30-day break in service.

Applicants may simultaneously be considered for other fulltime positions; however, accepting another Sandia position will make the applicant ineligible for the Truman Fellowship. Applicants may begin their Fellowship before the October 1 date, if the organization to which they will be placed agrees to cover costs until October 1. Truman Fellowships can begin as late as January of the following year, depending on extenuating circumstances. If your situation falls in these categories, please contact the Program Administrator for guidance.

#### 5.0 FELLOWSHIP SALARY AND BENEFITS

The starting salary is \$111,200. The salary is subject to deductions for income tax, Social Security, and the candidate's share of benefits. Fellows become full-time temporary employees of Sandia National Laboratories and are eligible for a benefits package that includes health, vision, and dental insurance; savings and income plan (40lk) and paid holidays and vacation. An incoming relocation benefit is included. For a full description of current benefits, click <a href="here">here</a>. Truman Fellows are eligible for the benefits offered to limited-term, temporary employees.

#### 6.0 FELLOWSHIP CRITERIA

Upon being accepted as a Truman Fellow, the following criteria must be adhered to during the term of appointment.

#### 6.1 Location

Truman Fellow appointments require a full-time commitment to the research program at Sandia, and Fellows must be in residence at Sandia (NM or CA) during the entire period of the appointment. In some cases, Sandia may provide for temporary location at another facility to meet the specific needs of the research program.

# **6.2 Schedule and Reports**

The proposed research must be scheduled to meet the overall research needs of Sandia. The Truman Fellow proposal is funded by Sandia's Laboratory Directed Research and Development (LDRD) Program and, as such, must meet those requirements. Requirements include submitting the proposal formatted to meet LDRD guidelines (the mentor generally completes this after Committee selection and before funding can be allocated), the Fellow then submits various progress reports and a final report at the end of the appointment. These reports include an abstract of the research conducted and copies of publications resulting from it. If future papers are published as a result of research performed at Sandia, copies must be provided to Sandia.

#### **6.3** Acknowledgement Statement

All published reports, journal articles, or professional presentations that are based on the research conducted during the term of the Truman Fellowship must carry the following acknowledgment:

"The author gratefully acknowledges support from the Sandia National Laboratories Truman Fellowship Program, which is funded by the Laboratory Directed Research and Development (LDRD) Program at Sandia National Laboratories, a multi-mission laboratory managed and operated by National Technology and Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International, Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525."

#### 6.4 Obligations

Truman Fellows are required to sign and abide by the appointment letter and the "Proprietary Information and Innovation Agreement" concerning discoveries, inventions, data, copyrights, and a disclaimer of liability.

#### 7.0 APPLICATION PROCESS

Contact the Truman Program Coordinator at <u>TrumanFellowship@sandia.gov</u> for further guidance and assistance regarding the application package. If you have questions concerning the online application process, contact Tom Schroeder on (505) 283-3290.

# 7.1 Application Package Contents

Candidates must submit their formal application packet through the electronic application (see 7.10). Upload a pdf of your packet, including your research proposal by 5 pm Mountain Daylight Time on October 15<sup>th</sup>, 2021. Direct questions via email to the Program Coordinator <a href="mailto:TrumanFellowship@sandia.gov">TrumanFellowship@sandia.gov</a>.

Items 7.1 through 7.6 in pdf format shall be included in the full application package (see 7.10). On the application cover page include the following (may be more than one page):

- 1. Full name
- 2. Current address, e-mail address, and permanent address for notification
- 3. Telephone and/or cell numbers
- 4. Short biography (up to two paragraphs)
- 5. Current department and institution
- 6. Title of proposed research project
- 7. Abstract of proposed research project
- 8. Title of doctoral thesis/dissertation
- 9. Planned starting date of the fellowship
- 10. Ph.D. granting institution and year of receipt (or date expected)
- 11. A listing of all countries of which applicant is a citizen
- 12. Name of a Sandia person/organization that fits your research interest and with whom you have discussed your research interests \*

<sup>\*</sup> Truman Fellows work closely with a Sandia sponsor. If you already know of a person or organization that matches your interest, please identify them, and contact them to obtain their support of your application. If not, please contact the Program Coordinator so you can be matched with a potential sponsor, at least one month before the October 15th deadline.

#### 7.2 Interest Statement

A statement of your reasons for interest in the Truman Fellowship, what you have accomplished to date (refer to 3.1 for additional requirements), current career goals, and potential role of the fellowship in attaining such goals (500 words).

#### 7.3 Thesis Abstract

The applicant's Ph.D. thesis abstract must be included in the application packet.

#### 7.4 Curriculum Vitae

Curriculum vitae must include educational background, topic of doctoral dissertation, positions held to date, scientific awards and grants received (citing source, duration, and amount), full titles and references of all publications.

# 7.5 Research Proposal

A research proposal (not to exceed ten pages plus appendices) describing the scientific importance of the proposed work, including considerable specificity as to the research plan and data to be obtained, written for a broad technical audience with field-specific terms explained fully. In the proposal, present the goals of the proposed research and plans to achieve them.

Provide a clear objective of the research, the expected results, and the impact that the proposed work may have on Sandia's Science and Technology capabilities. Include background material, such as previous studies done, and motivation for the proposed research. If desired, copies of reprints may be attached to each collated copy of the proposal. State the planned approach in order to clarify the direction of the research. Propose a schedule for the research and explain the importance and benefits to Sandia. Budget requirements are outlined in Section 7.6.

#### 7.6 Budget and Additional Funding Support Statement

The Truman Fellowship provides three years of funding for the salary of the Fellow, \$80K per year for purchases and other costs (technician time, student interns, etc.), and nominal funding (about 100 hours per year) for technical experts. The research proposal may include support for research and research-related activities. Requests may include: lab materials and supplies; conference/symposia support (includes travel, per diem and conference fees); professional society membership fee(s); and other support appropriate for the field of research. Identify new equipment required to conduct your research and/or your need to use Sandia's existing equipment.

Fellows may request additional funds beyond the \$80K per year allotted for purchases. All supplemental requests must be clearly identified and justified in the proposal. Items necessary and reasonable to conduct the proposed research will be provided (office space, computer, etc.) and need not be included in the budget request.

#### 7.7 Reference Letters

The application must include reference letters from three nationally recognized scientists, external to Sandia, in relevant disciplines who are knowledgeable about the candidate's capabilities and previous research, and who have been provided a copy of the candidate's research proposal. An

additional letter from a Sandia expert is acceptable. At least one of the references should have personal knowledge of the candidate's doctoral research and all must comment on the summary of the major findings of recent research. It is the candidate's responsibility to assure that reference letters are received by the proposal deadline.

Reference letters must be e-mailed directly from the reference as an attachment to the Program Coordinator (TrumanFellowship@sandia.gov) on official letterhead and signed by the author.

#### 7.8 Transcripts

An official copy of undergraduate and graduate transcripts must be provided and be sent directly to the Program Coordinator by the university (TrumanFellowship@sandia.gov).

### 7.9 Application Confirmation

You may contact the Program Coordinator to confirm that application materials have been received. All applications should be final and complete, including reference letters and transcripts. No substitutions or additions are permitted.

# 7.10 Application Submission and Deadline

All application materials must be **received by 5 PM Mountain Daylight Time**, **October 15**<sup>th</sup> at the address listed below (email preferred), for appointments that commence on October 1 of the following year. In addition, complete an online application, also by 5 PM, Mountain Daylight Time **here** and apply to Job #677947. Upload a pdf of your completed packet in the online application in the order specified by Sections 7.1-7.6. Transcripts and reference letters are sent directly to the Truman Fellowship Coordinator by e-mail: TrumanFellowship@sandia.gov

#### 8.0 PROPOSAL REVIEW PROCESS

A panel of Sandia senior scientists and engineers reviews applications for the Truman Fellowship annually before February 1. Interviews will be completed before March 1 for an October 1 start date. The Committee evaluates the application to determine the relevance to Sandia mission, the potential impact of the research in the scientific community, and the quality of the research proposal.